the eggs and young in situ, as well as a larger view of the young birds. Other papers are: 'A Walk to the Paoli Pine Barrens,' by William I. Serrill; 'The Yellow-winged Sparrow in Pennsylvania,' by Samuel Wright ; 'Trespassing of the Rose-breasted Grosbeak in the Carolinian Fauna,' by William B. Evans; 'Nesting of the Mockingbird in Eastern Pennsylvania,' by W. E. Roberts and W. E. Hannum ; 'A Spring Migration Record for 1893-1900,' by Frank L. Burns. - a tabular record of observations made at Berwyn, Chester Co., Pa.; 'The Spring Migration for 1901,' as observed by different members of the Club at five localities; an abstract of the proceedings of the Club for 1901, containing many interesting records. 'Bird Club Notes,' a list of the officers and members, and an index complete this interesting record of the year's work of the Club. The Club membership consists of 14 active members, 1 Honorary member, 53 Associate members, and 31 Corresponding members. In this connection attention may be called to an interesting historical sketch of the Delaware Valley Ornithological Club, by Mr. Samuel N. Rhoads, one of its founders, published in the April, 1902, number of ' Bird-Lore,' with a photograph of the Club in session.- J. A. A.

Lucas on a New Fossil Flightless Auk.¹—On the basis of a nearly complete humerus found in excavating a street tunnel at Los Angeles, California, Mr. Lucas has founded the new genus and species *Mancalla californiensis*, an extinct species of auk which he believes to have been flightless. He says: "The bird to which this humerus belonged was more highly specialized, more completely adapted for subaquatic flight, than the Great Auk, although the wings were not so extremely modified as those of the penguins....The occurrence of a flightless auk at so low a geological horizon as the Miocene is of great interest, as indicating a much earlier origin for the family."—J. A. A.

Perkins and Howe's Preliminary List of the Birds of Vermont.²— The authors state that one of the main objects in publishing the present list is "that fuller information as to our resident and migratory birds may be gained"; and that they regard it "as in no sense final, but only provisional." Acknowledgments are made of indebtedness to previous publications on the birds of the State, and for much hitherto unpublished information generously contributed by correspondents. The number of

¹A Flightless Auk, *Mancalla californiensis*, from the Miocene of California. By Frederick A. Lucas. Proc. U. S Nat. Mus., Vol. XXIV, 1901, pp. 133, 134.

²A Preliminary List of the Birds Found in Vermont. By George H. Perkins, Ph. D., Professor of Natural History, University of Vermont, assisted by Clifton D. Howe, M. S. Assistant in Biology, University of Vermont. Twenty-first Ann. Rep. Vermont State Board of Agriculture for 1901 (1902), pp. 85-118. Also separate, pp. 1-34, Dec. 1901.

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species recorded is 261, of which 19 are classed as permanent residents, 130 as migrants, 107 as summer residents, and 14 as winter residents. Although "the nomenclature used by the American Ornithologists' Union has been followed," it has not been brought up to date, "the names given being those found in Ridgway [sic] and other accessible manuals," better to adapt the list "for popular use," as "the list is not issued for the professional ornithologist."

The list is briefly annotated, but is evidently not based on thorough acquaintance with the ornithology of the State, and thus unfortunately contains some errors, both of omission and commission.

These need not be here dwelt upon, since Mr. Reginald Heber Howe, Jr., has pointed them out in a recent extended review of the list.¹ Mr. Howe states that he had had in view for some time the publication of a list of the birds of Vermont, and that he had "collected and compiled all the available data," which he now presents in the form of a review of Professor Perkins's 'Preliminary List.' Each species is taken "for convenience sake," in the order of the original list, and corrections of misstatements as to seasons or manner of occurrence are corrected, species improperly included are eliminated, and omitted species are added. According to this author's 'recapitulation' (p. 22), the total number of species entitled to recognition as Vermont birds is 255, as against "266" (261+3 informally mentioned = 264) in the Perkins list, 27 species and 3 subspecies having been "expunged," and 14 species and 2 subspecies added. Of the additions, however, four-fifths are water birds, for the most part of casual or accidental occurrence, and several of the "expunged" species have quite as good a right to a place in the list as some of those Mr. Howe adds. In other cases Professor Perkins admitted species on the authority (which he states) of other observers, which authority, justly or unjustly (doubtless the latter, in some cases) Mr. Howe rejects as insufficient. In short, Professor Perkins's list is not such a bad list, as lists go when not prepared by an expert; it contains loose statements as to the manner of occurrence of quite a number of species, includes a few on insufficient data, and omits a few others, usually of rare or accidental occurrence, recorded in such a way as readily to be overlooked by the ordinary compiler. On the other hand Mr. Howe's review, while correcting many of the defects of the Perkins list, is hypercritical in spirit, and not altogether consistent in treatment of practically similar cases. Take the Canvasback Duck, Barrow's Goldeneve, the Least Bittern, Dowitcher, etc., included as positively known to occur by Perkins but thrown out by Howe because no Vermont specimen can be cited, and the Marbled Godwit, etc., included on the basis of its

¹A Review of Prof. George H. Perkins' "A Preliminary List of the Bird found in Vermont." By Reginald Heber Howe, Junior. Contributions to North American Ornithology, Vol. II, pp. 5–22. Jan. 30, 1902. mention in Williams's 1794 List, which in other cases is rejected by Mr. Howe as incompetent authority.

Another feature hardly fair to Mr. Perkins is the rejection in Mr. Howe's 'Review' of ten species which, without direct comparison of the two lists, the reader would suppose were to be found in the Perkins list, but which are not, and are introduced by Howe for comment because accredited to Vermont, as he believes, on insufficient evidence.

Mr. Howe's 'Review' is, however, an important contribution to a more correct knowledge of Vermont birds, and together the two papers form a substantial basis for further work. -J. A. A.

Packard's ' Lamarck, His Life and Work.'I - Although Lamarck cannot be ranked as an ornithologist, his views on evolution, and the life of the man cannot fail to be of interest to every biologist. In this volume Dr. Packard has very charmingly brought together the little that is known of his personal history and heroic struggle with many adverse circumstances, and a translation of the more important of his writings relating to evolution. That he paved the way for the doctrine so ably established by Darwin half a century later has become duly recognized. Yet the views of these two great investigators were in reality quite different, Lamarck's being the broader, and in some respects the more fundamental. In a word, Lamarck was an evolutionist in a broad sense, Darwin a natural selectionist. Lamarck was a believer in the transmutation of species through the direct influence of environment, the use and disuse of parts, effort, habit; the 'survival of the fittest' principle, or 'natural selection' was the important contribution of Darwin. While Darwin has his multitude of followers, so has Lamarck. Neolamarckism is only Lamarckism shorn of certain crudities naturally involved in the first conception of a great theory when biology was in its infancy.- J. A. A.

[•] Upland Game Birds.² — This is the second volume, in point of issue, of the 'American Sportsman's Library' series, to be completed in ten volumes, under the editorial supervision of Mr. Caspar Whitney, the

¹Lamarck | the Founder of Evolution | His Life and Work | with translations of his | writings on Organic Evolution | By | Alpheus S. Packard, M. D., LL. D. | Professor of Zoology and Geology in Brown University; author of "Guide to the | Study of Insects," "Text-book of Entomology," etc., etc. | | Longmans, Green, and Co. | 91 and 93 Fifth Avenue, New York | London and Bombay | 1901. — 8vo, pp. xiv+451, with illustrations.

² Upland Game Birds | By | Edwyn Sandys | and T. S. Van Dyke | Illustrated by L. A. Fuertes, A. B. Frost | J. O. Nugent, and C. L. Bull | [Vignette] New York | The Macmillan Company | London : Macmillan & Co., Ltd. | 1902 | All rights reserved. American Sportsman's Library Series. 8vo, pp. ix+429, 9 half-tone plates. Price \$2.00.

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